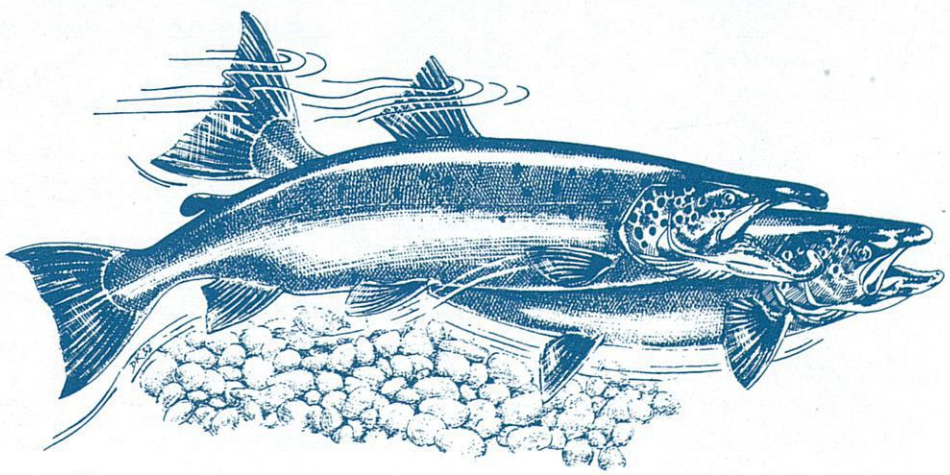
THE REGULATION OF SALMON ANGLING IN GREAT BRITAIN

Report of the Salmon Advisory Committee



Ministry of Agriculture, Fisheries and Food
Scottish Office Agriculture, Environment and Fisheries Department
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2. BACKGROUND

2.1 HISTORY AND DEVELOPMENT OF ANGLING

Angling originated as a means of providing food for survival; it is now considered synonymous with fishing by means of rod and line, and is used in that sense in the remainder of this report. By this definition, angling is an activity of considerable antiquity, being depicted, for example, in an Egyptian fishing scene of about 2000 BC. The publication of the *Treatyse of Fysshynge Wyth an Angle*[1] suggests that the practice of angling with rod and line was already well developed in England in the 15th century. Further early books on angling indicate that fly-fishing for salmon was an established technique in Scotland in the early 1600s.

Angling for salmon in the 17th and 18th centuries was probably still pursued primarily to provide food rather than as a sporting activity. Later, the better stretches of large rivers were fished by the owners and their friends for pleasure, and by their ghillies and keepers for the table. By the 19th century, beats would often be let on long leases covering one or more seasons. Angling effort was greatly affected by the seasons and opportunities for alternative sporting activities.

The popularity of angling as a recreational activity increased only gradually until the 20th century, but the development of road and rail transport gave many more people access to areas and opportunities not previously available to them. This contributed to the major development in the sport that has taken place in the past 100 years. The greatest expansion has probably occurred in fisheries for coarse species. These are now fished almost exclusively for recreation, with most fish being returned alive to the water. Although difficult to quantify, there has also been a general increase throughout this century in the number of anglers fishing for salmon and trout with an attendant increase in total angling effort.

The letting of salmon angling in the last 25 years has become an important business. Fishing is now often let by the week or part-week, or for a fixed day of the week throughout the season. Permits to fish for a day are also available in many places. Angling clubs and associations own, or rent, significant stretches of many rivers. In addition, stretches on some rivers have been sold by time-share, resulting in different individuals or groups owning the fishing rights on part of a river for particular periods of the year.

Improvements in equipment have resulted in an increase in fishing effort. Developments in rod-making technology and the materials available have resulted in rods being lighter and easier to handle. Longer periods of angling can thus be undertaken without fatigue. On some rivers outboard motors are now used, allowing longer periods of more effective angling than with boats reliant on oarsmen.

All of these factors contribute to increasing the angling pressure on salmon stocks. However, because of the finite nature and scarcity of good salmon angling opportunities, proprietors, angling clubs and associations are able to impose a rigorous discipline on their tenants and members in the application of conservation measures, and many do so. This may offset the effect of increased angling pressure on the level of exploitation.

One of the most recent developments in salmon angling has been an increasing tendency for some anglers to return some or all of their catch alive, even though the fish could be legally landed and killed. This development reflects a changing attitude and a growing recognition that some stocks are under threat and that further measures may be necessary to avoid over-fishing. This contrasts with former times, when some of the renowned anglers were better known for the numbers of fish which they killed than for those which they returned voluntarily to the river.

2.2 ANGLING CATCHES

The average annual catch of salmon and grilse reported by anglers in England & Wales between 1952 and 1994 has been about 20,000 fish (Figure 1). The annual catches generally fluctuated around this average level for the first half of the period, although they rose to around 30,000 in the mid-1960s. They have since declined and were below 15,000 in the periods 1982–84 and 1989–93.

The proportion of the total annual rod and net catch taken by anglers decreased from around 35% in the 1950s and 1960s to less than 15% in the mid-1980s. This was partly due to the great increase in the catches taken by the north-east coast

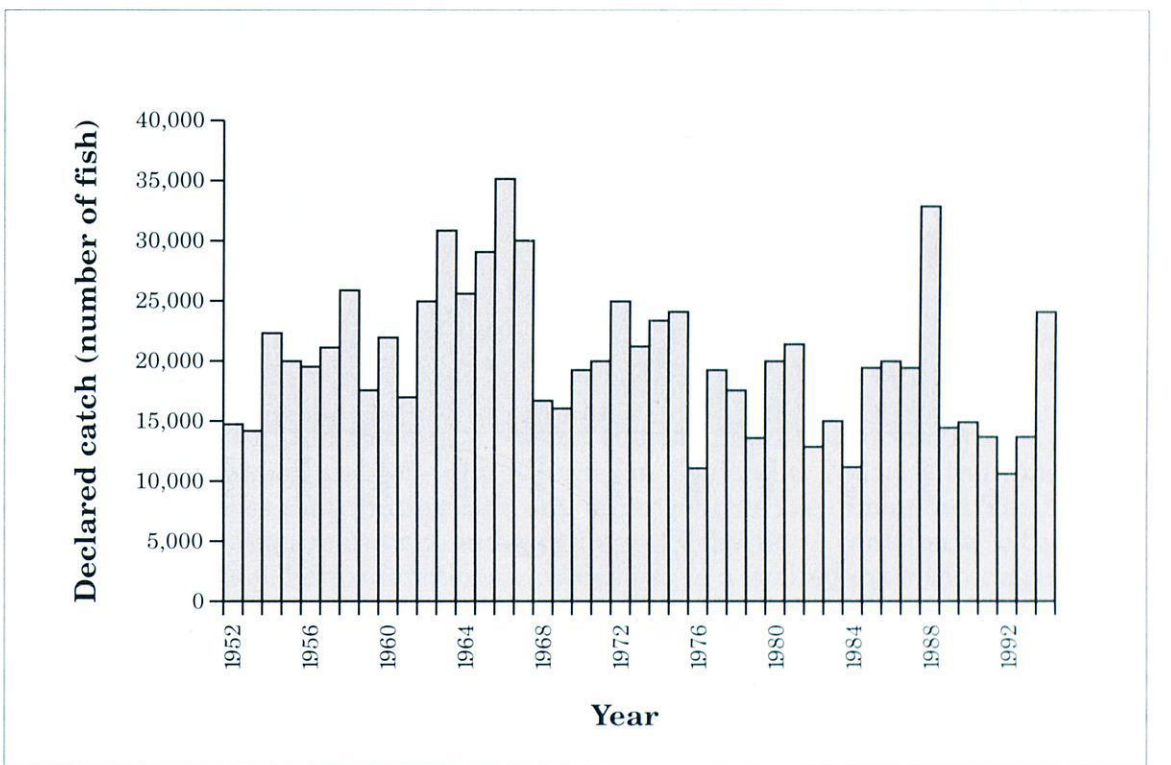

Figure 1: *Declared catches of salmon and grilse taken by rod and line in England & Wales from 1952 to 1994. (Sources of data: Russell et al. 1996[2] and NRA Fisheries Statistics Reports[3])*

drift net fishery in the 1960s. In recent years the proportion of the catch taken by anglers has increased to around 25%, reflecting the overall decline in net catches in England & Wales. It also varies between regions, from about 55% in Wales to less than 5% in the north-east of England. On most rivers there is some netting but, on a few, anglers account for almost all the catch. The total declared annual catch by

nets and rods before 1 May has averaged about 1,700 salmon between 1990 and 1994, and nearly 60% of this number has been taken by anglers.

In Scotland, the average annual catch of salmon and grilse reported by anglers has increased from around 57,000 in the 1950s to about 65,000 in the 1960s and 1970s and about 75,000 in the 1980s and 1990s (Figure 2). The proportion of the total salmon catch taken by anglers was around 15% until the end of the 1970s, but has since risen steadily, reaching about 45% between 1991 and 1994. This reflects both the increase in the rod catch and the steep decline in the net catch. As in England & Wales, there are marked differences between regions in the proportion of the catch taken by anglers, from over 75% in the Moray Firth Region to about 25% in the North West Region in recent years. Throughout Scotland, the total declared catch by nets and rods before 1 May has, since 1990, averaged about 8,200 salmon in each year, of which about 80% were taken by anglers.

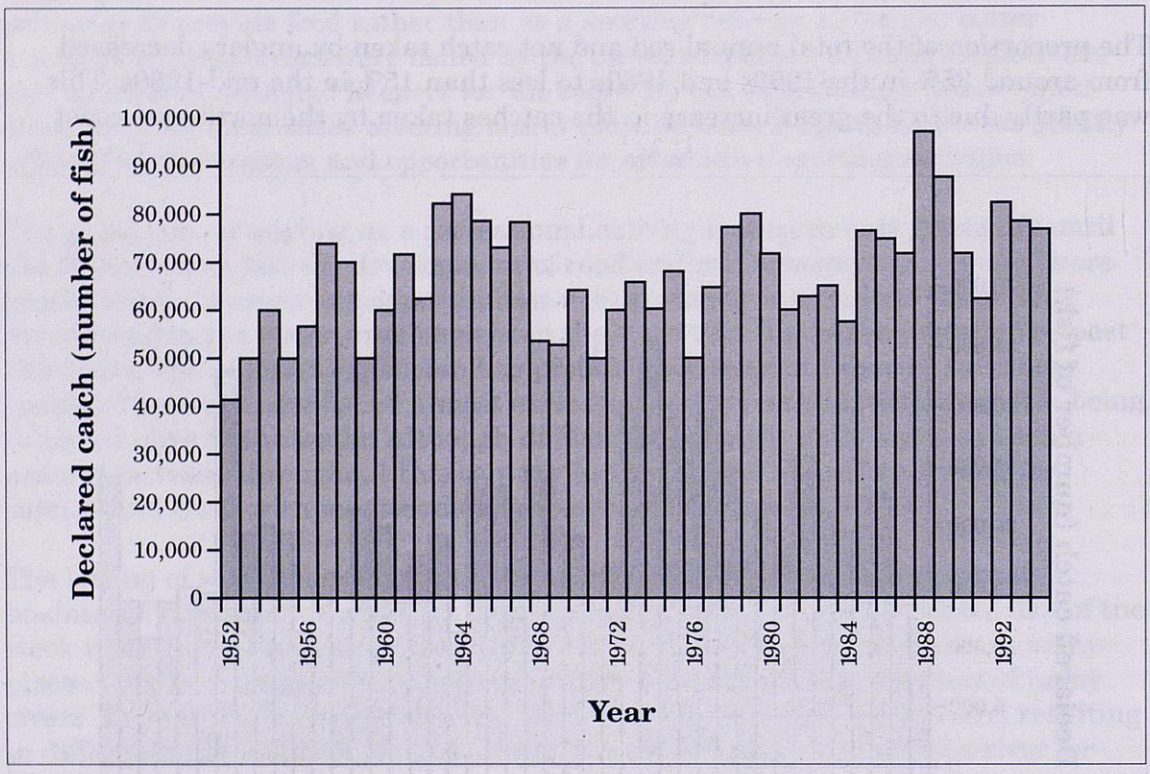

Figure 2: *Declared catches of salmon and grilse taken by rod and line in Scotland from 1952 to 1994. (Source of data: Scottish Office Agriculture, Environment and Fisheries Department[4,5])*

Indications that the numbers of returning salmon and grilse were greatly reduced in 1990 and 1991 prompted concern that it may be necessary to restrict the catches by anglers so as to ensure adequate spawning escapement. Previously it had been thought that, in general, angling was unlikely to have a critical effect on spawning stocks. However, the above figures clearly indicate that angling can account for most of the catch of salmon and grilse in some areas. It is against this background that we were asked to look at the actual and potential controls on salmon angling and to comment on their suitability and effectiveness in Great Britain.

2.3 ECONOMICS OF ANGLING

A number of studies have shown that salmon angling makes an important contribution to the economy of some regions[6,7]. These studies have confirmed that salmon rod fisheries attract tourists to areas to which they might not otherwise go and at times of the year when hotels and boarding houses might otherwise be empty. It is particularly significant that salmon angling often takes place in remote areas with small communities and fragile economies. Thus the employment opportunities offered by salmon fisheries are of vital importance to such communities, and a record of poor catches by rod and line over a period of years will be economically damaging to them. It is therefore important that appropriate measures are available and, where necessary, in place to manage and regulate fisheries in order that an exploitable stock can be sustained.

In most economic studies of salmon fisheries, the contribution of rod fisheries to the economy has been expressed in terms of the value of each fish caught. These studies have not determined how the economic benefits would be affected if the level of catches were to change. In practice the rental income to a fishery is related to the size of the expected catch. However, as each additional fish caught will tend to generate a smaller income than its predecessor, it is often difficult to estimate accurately the economic effects of any change in the balance of exploitation which may result from changes in regulations.

2.4 FINANCING OF FISHERIES MANAGEMENT

In England & Wales, the Ministry of Agriculture, Fisheries and Food (MAFF) and the Welsh Office have overall responsibility for the management of salmon fisheries, while the National Rivers Authority (NRA)* is responsible for the operational management and regulation of these fisheries. The NRA has a duty to maintain, improve and develop salmon and other inland fisheries; it regulates fisheries through byelaws and net limitation orders, although these are only valid if confirmed by Ministers.

In 1995/96, Grant-in-Aid from the Treasury provided over 80% of the NRA's expenditure on salmon and sea-trout fisheries in England & Wales, with income from rod and net licences contributing 12% and other sources the remainder. The NRA has the power to require owners and occupiers of fisheries to contribute to the cost of carrying out its fisheries functions, and does so to a limited extent in respect of some fisheries in Wales, but the income from this is negligible.

In Scotland, angling methods are controlled by primary legislation, which applies to the whole country, and by subordinate legislation which usually applies locally. Owners of salmon fisheries in a district may set up a District Salmon Fishery Board (DSFB) for the protection and development of their fisheries. The DSFBs have no powers to make their own regulations but may apply to the Secretary of State to make a limited range of regulations.

In Scotland, DSFBs are not grant-aided by the Treasury nor is there any licensing scheme. The principal source of revenue to DSFBs is the assessment made on proprietors of salmon fisheries in the District.

Throughout Great Britain, individual proprietors may also directly fund the management of their own fisheries.

*With effect from 1 April 1996 the duties and functions of the National Rivers Authority (NRA), which are referred to throughout this report, were taken over by the Environment Agency.

3. IMPACT OF ANGLING ON SALMON POPULATIONS

The impact of a fishery on a salmon population is often expressed as the proportion of the total population that is caught (i.e. the level of exploitation). However, in order to assess the full effect of the fishery, it is also necessary to know whether an adequate number of fish is being allowed to spawn in order to optimise the production of juveniles. The difference, if any, between this number (the spawning requirement) and the population size represents the surplus that is available for exploitation (the exploitable surplus). Unfortunately, methods to derive estimates of spawning requirement are relatively new and are only now beginning to be applied to the management of salmon fisheries.

It is not possible to generalise about the size of the exploitable surplus, and thus the level of angling exploitation, that a salmon population can sustain as this will be affected by many factors. These will include the productivity of the river (i.e. the numbers of smolts produced per spawner in the previous generation), the level of mortality of salmon in the sea and the level of exploitation of the population in other fisheries. Thus, for example, if the productivity of a river is increased or marine mortality decreases, there will be a larger exploitable surplus and the population will be able to sustain a higher level of exploitation. These factors will vary between rivers and also between years.

The numbers of salmon caught by rod fisheries on different parts of a river will depend upon a large number of factors, including the location of the fisheries on the river, river conditions such as flow and temperature, and the run-timing and behaviour of the fish. Thus different fisheries will have different impacts on the stock and even particular stock components (e.g. spring-running fish). In addition, fisheries in the lower reaches of a river will affect the catches in fisheries operating further upstream and thus their impacts on the stock.

While it is clear from the above discussion that care must be taken when interpreting levels of exploitation, they are still a useful measure of the performance of a fishery. Exploitation levels have been estimated for rod fisheries in a number of rivers in Great Britain by tagging experiments or by comparing catches with estimates of the population size obtained from traps or counters. Such studies suggest that levels of exploitation by anglers on different salmon populations (or particular components of populations) may vary from around 5% to as much as 50%[8,9].

Many factors affect angling exploitation levels, including the topography of the river, water temperature, river flow, the timing of the main runs and the fishing methods employed. However, the effects of these factors are difficult to quantify because, for example, particular methods may be suitable only on certain types of river or under particular flow conditions.

Salmon are most vulnerable to capture by rod and line for about the first three weeks after they enter fresh water, although this period may be longer for spring-running fish. After a relatively quiescent period when they may be very difficult to catch, salmon become more easily caught with the onset of pre-spawning activity in the autumn[10–12].

Levels of exploitation of early-running, multi-sea-winter (MSW) salmon are generally higher than of grilse (one-sea-winter fish, 1SW) entering the river in the summer and autumn. For example, data from the River Dee (North Wales) show

increasing levels of exploitation of older sea-age groups of salmon (Table 1) and, excluding February, of fish which enter the river earlier in the year (Figure 3)[13]. This is partly because earlier-running salmon are available to the rod fishery for a longer period than later-running fish and are therefore subjected to greater angling pressure. The lower exploitation rate of fish entering the River Dee in February may reflect the fact that the fishing effort in this month is very low (about 4% of the annual total).

TABLE 1. Level of rod exploitation (%) of each sea-age group of salmon entering the River Dee (Wales) in the years 1992–94. (Source: Davidson *et al.* 1996[13])

Year	Sea-age of salmon			All
	1SW	2SW	3SW	
1992	16.3	19.6	26.7	17.4
1993	13.3	18.6	26.7	14.7
1994	16.8	23.7	22.5	18.1
Mean	**13.5**	**20.6**	**25.9**	**15.2**

SW, sea-winter.

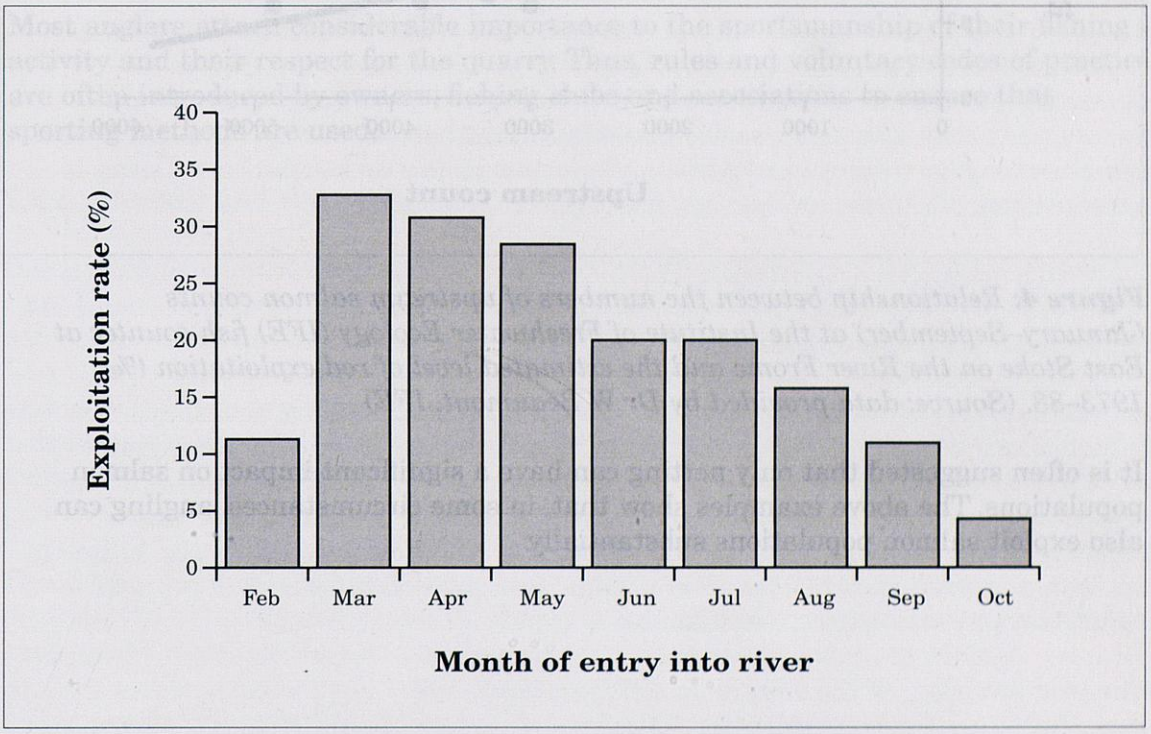

Figure 3: *Mean level of rod exploitation (%) of salmon entering the River Dee (Wales) in different months in the years 1992–94. (Source: Davidson et al. 1996[13])*

It is widely accepted by anglers and fishery managers that angling methods vary in their efficiency. In particular, fishing with baits such as prawn, shrimp or worm tends to be more effective than fly-fishing in certain conditions. As a result, overall levels of exploitation tend to be higher on rivers where a significant proportion of anglers fish with bait compared with rivers where most angling is restricted to fly-fishing.

In some studies the level of exploitation by rods has also been shown to increase as the population size declines and this may account for a large variation in exploitation level[12]. An example of this is seen on the River Frome in southern England (Figure 4). Thus the rod fishery may have a greater impact if the stock declines and, if catch data only are available as an indicator of the stock size, this can lead to the rate of decline being substantially underestimated[14]. The level of exploitation may rise sharply as the population size falls to very low levels, as indicated on the River Frome.

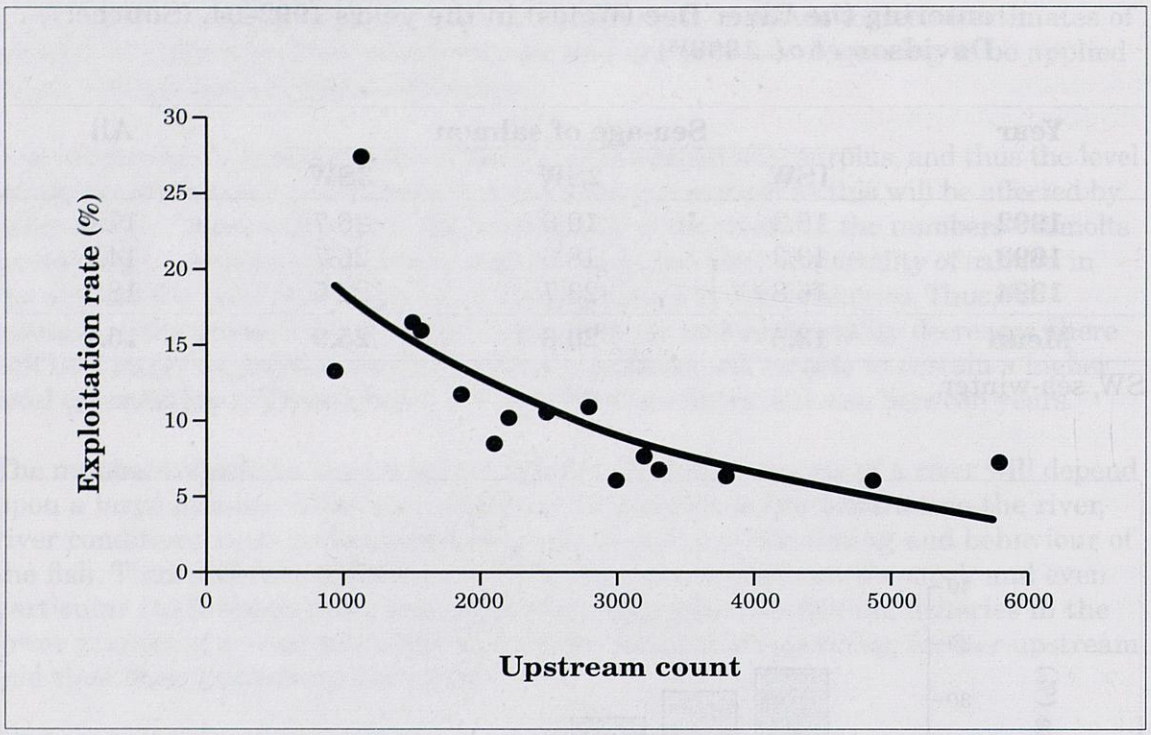

Figure 4: *Relationship between the numbers of upstream salmon counts (January–September) at the Institute of Freshwater Ecology (IFE) fish counter at East Stoke on the River Frome and the estimated level of rod exploitation (%), 1973–88. (Source: data provided by Dr W Beaumont, IFE)*

It is often suggested that only netting can have a significant impact on salmon populations. The above examples show that, in some circumstances, angling can also exploit salmon populations substantially.

4. PURPOSE OF FISHERY REGULATIONS

The principal purpose of managing salmon fisheries is to ensure that the benefits derived from exploiting the salmon resource can be maximised and sustained. This requires not only regulations to ensure that sufficient fish are allowed to spawn in order to optimise production of smolts in each generation, but also that mechanisms are available to control the pattern of exploitation.

The main reason for regulating fishing activity is to prevent over-exploitation of fish stocks, thus ensuring that sufficient fish survive to spawn. The migratory behaviour of salmon makes them vulnerable to fisheries because they move in a predictable way through areas in which they may be easy to catch. It may be necessary to limit exploitation in one area so that an exploitable surplus is still available when the population enters another area. This applies to both net and rod fisheries.

Recent research has given today's owners and fishery managers a much greater knowledge of the status of salmon stocks than was available 10 or 20 years ago. Fish counters and radio tracking, for example, have revealed valuable information upon which informed management decisions can be based. In order to make full use of this information to influence the impact of angling upon salmon stocks, managers need to be able to impose suitable controls.

Most anglers attach considerable importance to the sportsmanship of their fishing activity and their respect for the quarry. Thus, rules and voluntary codes of practice are often introduced by owners, fishing clubs and associations to ensure that sporting methods are used.

5. MEASURES TO CONTROL ANGLING EXPLOITATION

5.1 INTRODUCTION

This section summarises the various measures that can be used to control salmon angling. The methods most commonly applied restrict access to the fishery in time (close periods) or space (restricted areas), make angling less efficient (e.g. bait restrictions) or directly restrict the number or description (e.g. size) of fish that may be taken. Different types of regulation may be employed to protect stocks in particular areas or at certain times of year, or to limit exploitation of different parts of a salmon population. A further factor affecting the methods used to regulate fishing is the economics of the fisheries. Where there is a need to reduce the level of angling exploitation, it may be more appropriate to limit catches, for example by bag limits or the use of less efficient methods, than to close the fishery for a period. In this way sporting and economic opportunities will continue to be provided, while the number of fish killed is reduced.

In this section, references are made to the ways in which the legislation is or may be used in England & Wales or Scotland. Where measures are not employed in Great Britain, examples are given of their use to control salmon angling in other countries. We have not considered the control of river management practices, such as the modification of pools and the building of croys or groynes, which may be designed to affect the availability of fish to a particular rod fishery. However, it should be noted that these activities may have implications for fisheries management because if they are designed to improve catches in one part of the fishery, they may also increase the exploitation rate of the whole population. (Such practices may be subject to controls under common law or legislation relating to conservation, planning, navigation, drainage or flood defence.)

5.2 CLOSURE OF FISHERIES

5.2.1 Annual close season

An annual close season is a period of the year, usually of several months, when fishing is not permitted. In Great Britain, rod fisheries for salmon are normally closed for about three months between late autumn and early spring in order to protect fish that are about to spawn, are in the process of spawning or are recovering from spawning. While the legislation specifically prohibits the killing of unclean and unseasonable fish, the annual close season provides the fish with additional protection from disturbance.

The precise timing of the closure on different rivers may be adjusted to reflect the run characteristics and spawning time of different salmon populations and other local factors. Thus there may be considerable variation in annual close seasons between rivers, and local circumstances may even warrant there being different close seasons within a single catchment. Annual close seasons can also be adjusted to influence the level of exploitation on particular components of a river's salmon population. Thus the start of the close season may be delayed to permit fishing for late-running salmon or its end may be deferred to reduce the level of exploitation of spring fish when they first enter freshwater. A close season might also be used to provide a respite for the fish at other times of the year, for example during summer months.

Close seasons are relatively easy to enforce and are an effective means of reducing disturbance and losses of spawning fish. Their effectiveness as a means of controlling exploitation of particular components of a population is less clear. For example, although spring fish may be protected when they first enter freshwater, they may still be subjected to exploitation by the rod fishery throughout the angling season.

In England & Wales, the Salmon and Freshwater Fisheries Act 1975 specifies a minimum Annual Close Season of 92 days for salmon fishing with rod and line. The Act provides that this shall be the period between 1 November and 31 January inclusive, but this period can be modified by byelaw, and this has resulted in there being a very wide range of dates on which the season may open or close on different rivers. It is not clear whether existing legislation could be used to introduce a second annual close season at another time of year. However, we understand that it would probably be possible to provide for this by modifying the existing legislation by means of an Order under section 115 of the Water Resources Act 1991.

In Scotland, the Annual Close Time for salmon fishing is a continuous period of not less than 168 days, but angling can be permitted for specified periods at the beginning and/or end of that time. The actual period is fixed separately for each District by regulations made by the Secretary of State. There are special arrangements for the River Tweed, where the close time for all angling except by fly is 152 days but for fly-fishing the close time is 62 days. There is no provision in Scotland for having a second seasonal close time.

Some owners of fishing rights impose additional constraints by opening the season later or closing it earlier than required by law in an attempt to give extra protection to smolts, kelts, early or late-running fish.

5.2.2 Weekly and daily close times

During the fishing season, angling may be prohibited for periods of the week (weekly close times) or hours of the day/night (daily close times). Such periods are usually used to limit the amount of angling activity and thus reduce the level of exploitation on a fish population. However, some fishery owners close their fisheries for several hours each day to give the fish some respite. In some cases, this may be designed to reduce exploitation, but in others it may be in order to improve the sport for anglers fishing for salmon or sea trout later. Closure of fisheries at night may also be used to guard against illegal fishing or make it easier to police such activity.

The effectiveness of weekly and daily close times as a means of reducing exploitation has not been assessed. However a closure, for example, of one day in each week would not be expected to reduce catches by the same proportion.

In England & Wales there is no weekly close time for salmon rod fishing set by statute or by byelaw nor any existing legislation that could be used to introduce one. However, we understand that it would probably be possible to provide for this by modifying the existing legislation by means of an Order under section 115 of the Water Resources Act 1991. Night-time angling for salmon is prohibited by byelaw in parts of the north-east of England.

In Scotland there is a statutory prohibition on fishing for salmon by rod and line on Sundays; there is no provision for daily close times.

Daily closures are applied on a voluntary basis by fishery owners on a number of rivers or beats; fishing may be banned on a particular day of the week or for a few hours each day.

5.2.3 Closed areas

Closed areas are sections of rivers where angling is not permitted. Closures have been most commonly used to stop or restrict fishing in the vicinity of weirs, fish passes, fish traps and natural barriers. They can be an effective way to prevent legal fishing and discourage illegal activity at sites where salmon are known to congregate and are therefore vulnerable to heavy exploitation. Protection of certain components of the stock, particularly in headwaters, may be achieved by closure of fisheries for the whole year by agreement with the owners.

In Iceland, angling is normally forbidden within 100 metres upstream or 250 metres downstream of any confluence or influx to a lake or within 50 metres of an efflux from a lake. This regulation is designed to protect fish that are waiting to move up into tributaries and may also reduce the risk of conflict between neighbouring fisheries.

In England & Wales, closed areas defined by byelaws are used to control angling at a large number of sites, particularly around dams, weirs and natural falls. Such closed areas are defined by landmarks or distances upstream and/or downstream of an obstruction. They can also operate for particular seasons of the year or times of day, and can apply to anglers using particular methods.

In Scotland, it is prohibited to fish in any fish pass. Otherwise there are no provisions for statutory closed areas.

In some instances, owners of fishing rights impose further restrictions on parts of the river within their ownership.

5.2.4 Closure related to river conditions

It has been suggested that angling activity could usefully be restricted under particular river conditions, such as during periods of low flow. The purpose of such measures would be to protect salmon at times when they may be easy to catch by illegal means, or when they may be under stress from adverse environmental conditions.

Such measures are likely to be very difficult to implement because of the problems of defining when fishing should be prohibited on different parts of the river system. It may also be difficult to ensure that anglers can easily find out when the fishery is closed. In our earlier report, *The Effects of Fishing at Low Water Levels*, we commented on the effects of fishing at times of low flows and have shown that anglers generally catch few salmon at such times. As a result there may be relatively little benefit in closing rod fisheries under these conditions.

In England & Wales it would be possible to introduce such measures by byelaw provided that the circumstances in which fishing is prohibited can be defined in the byelaw in a way that is easily understood by anglers and fishery owners: this could be difficult in some cases.

In Scotland there is no provision in current legislation to introduce such measures.

Some owners of fishing rights are known to voluntarily close their waters at times of low flows to reduce the risks of over-exploitation and illegal fishing.

5.3 ACCESS RESTRICTIONS

5.3.1 Licences

Access to rod fisheries could be controlled through licensing systems administered by a regulatory authority. Where a limit can be placed on the number of licences issued, such a system can be used to restrict fishing effort.

In North America, licences are used to impose further restrictions; in Canada and on the Connecticut River, USA, the licence incorporates a bag limit and a carcass tagging system, although in both cases no limit is placed on the number of licences which can be issued; in Maine, USA, the licence must be carried when transporting fish.

In England & Wales, although the NRA is required by statute to regulate fishing by means of a licensing system, these licences are available on demand and there is no power to limit the number of rod licences issued. The licences provide a means of recording who is legally participating in the fishery and a source of income to the NRA, but not a means of controlling exploitation.

In Scotland there is no licensing system.

5.3.2 Limit on number of anglers

Even in the absence of a licensing system, access may be limited by imposing restrictions on the numbers of anglers who may fish on a river in any period. Such a control is used in Iceland, where the maximum number of people who may fish on each river is set by a central Fisheries Council in discussion with river associations. The river association then divides the allocated number between the proprietors. After five years, the number can be reassessed, taking into account the state of stocks and any enhancement carried out by the association.

In England & Wales and in Scotland there are no statutory provisions for imposing restrictions on the number of people angling. However, most owners institute their own limits on the numbers of anglers who may fish on each beat.

5.3.3 Owner's permission

Where fisheries are privately owned, there may be a statutory requirement for anglers to have the authorisation of the fishery owner to fish on a particular water. Such permission may be in writing or given verbally. This provides a means by which the number of anglers may be limited. However, any limit is normally at the discretion of the fishery owners and applied on a local basis. As a result, it will not normally be possible to relate the restriction on fishing activity to the requirements of the whole fish population.

In England & Wales, whether or not an angler holds an NRA licence, it is an offence under the Theft Act 1968 to unlawfully take or destroy fish in any water which is private property or in which there is a private right of fishing.

In Scotland it is an offence under the fisheries legislation to fish for salmon without the legal right to fish the water or the written permission of the person who has that legal right.

Throughout Great Britain, the owners of most salmon fisheries, whether individuals or organisations such as clubs, syndicates, companies or hotels, impose an upper limit on the number of anglers permitted to fish on any particular beat.

5.4 METHODS AND EQUIPMENT

5.4.1 Instruments

Salmon angling is restricted to the use of rod and line, and legislation may control the number and description of rods that anglers may use. Additional controls may be imposed on the use of ancillary equipment; for example, tailers and gaffs are frequently banned in order to limit the damage to fish that have to be released (unseasonable fish). Measures may also be introduced to ban instruments that may be used illegally under the guise of legal angling, e.g. weighted treble hooks used to foul-hook fish.

These controls may be extended to address the way that equipment is used (e.g. trolling) and the use of boats and engines. For example, in Finland, fishing with rod and line from a boat whilst the engine is running is prohibited.

In England & Wales the Salmon and Freshwater Fisheries Act 1975 specifies that a variety of instruments, including crosslines, setlines, stroke-hauls and snatches, may not be used for taking salmon. In addition, fishing (other than with nets or fixed engines) is restricted by byelaws to rod and line. Additional byelaws in certain areas specify the number of rods that may be used, and in one area there is a minimum rod length of 1.5 metres. The use of gaffs and tailers is restricted in many areas.

In Scotland a similar range of methods (crosslines, setlines, etc.) is effectively prohibited under the Salmon and Freshwater Fisheries (Protection) (Scotland) Act 1951. There is no statutory ban on the use of a gaff or tailer in association with rod and line, except on the Tweed where a gaff may not be used after 15 September. There is no express limitation on the number of rods that may be used by an angler, but the use of set rods (i.e. using rod rests or simply resting the rod on the bank) is not lawful.

5.4.2 Baits and lures

Controls on baits and lures may be introduced to make angling less efficient, to limit unsporting fishing activities or to discourage the illegal taking of fish by foul-hooking. Distinctions may be drawn between specific baits (e.g. worm, prawn, shrimp or maggot) and lures (e.g. artificial flies and spinners), or by reference to the number or size of hooks used or the overall size or weight of the lure.

Bait restrictions are often used to limit catches while allowing the level of angling activity to be maintained. They are believed to be effective in reducing the exploitation rate in some situations, but their efficiency varies between fisheries. Fishing with bait is generally assumed to be the easiest and most effective salmon angling method, while fly-fishing is usually less efficient. However, fly-fishing may be very much more effective on some parts of a river than others. Certain baits may also be banned to facilitate the release of fish in an undamaged condition.

In Canada gear restrictions can be altered as information is obtained on the state of the fishery. The Regional Director General may announce in the local papers and on the radio that certain fishing gear is prohibited, and its use then becomes an offence.

In England & Wales the use of any fish roe in fishing for salmon is prohibited by statute. There are also byelaws specifying the baits or lures that may (or may not) be used on many rivers. On a number of rivers, anglers are restricted to fly-fishing before the end of May in order to reduce the catch of early-running fish.

In Scotland it is also prohibited to use any fish roe as a bait. DSFBs may apply to the Secretary of State to make regulations specifying particular baits or lures that may not be used in their District. Several such regulations have been made in relation to the use of shrimp and prawn. On the Tweed, there is a statutory restriction to fly-fishing only from 1 February to 14 February and from 15 September to 30 November each year (the close time runs from 1 December to 31 January).

Fishery owners, clubs and associations also sometimes ban the use of spinners or particular baits for all or part of a season or when prescribed water conditions prevail. In recent years, there has been some use of barbless hooks, in order to limit damage to fish that may be released.

5.5 CONTROLS ON CATCH LEVELS

5.5.1 Total allowable catches and quotas

Total allowable catches (TACs) and quotas can be used to impose limits on the numbers of fish killed. TACs define the total catch that may be allowed in a number of fisheries exploiting the same stocks; they are usually enforced by allocating quotas to each area, method or group of fishermen. However, quotas may also be established without a TAC.

To be effective as conservation measures, TACs or quotas need to be related to assessments of the population size and the number of fish required for spawning. If such assessments are not made on an annual basis, catch limits will provide only a crude method of controlling the level of exploitation and may be less effective than effort control (e.g. access limits). Quotas are, therefore, difficult to set and require careful monitoring. Quotas must also be administered by an agency which can collect information on catches and enforce closures when the limit is reached.

In the case of rod fisheries, it can be difficult to obtain the required information on catches because enforcement staff will only see a limited number of the fish caught. As a result, quota controls are unlikely to be effective unless a carcass tagging scheme is in operation. A further problem with a quota can be that fishermen may increase their fishing effort early in the season in order to maximise their catch before the fishery is closed. Thus spring-running fish, for example, could be over-exploited unless the quota was divided between periods of the year. In addition, fisheries which normally operate later in the year, such as those further upstream, may be discriminated against unless the quota is apportioned on a local basis.

A TAC has been calculated annually for North American Atlantic salmon stocks since 1993 and this provides the basis for setting the quota for the West Greenland net fishery. A quota is also agreed, in the absence of a TAC, for the Faroes long-line fishery, where it sets a catch ceiling. Quota controls have also been used in Canada

and Spain and are rigorously applied by officers who are empowered to stop the killing of fish when they believe that the quota has been reached.

In England & Wales there is no legislative provision for the imposition of a TAC for salmon, nor, it seems, any power to introduce separate catch quotas for different areas.

In Scotland there is no provision to impose TACs or quotas on salmon fisheries.

5.5.2 Bag limits

Bag limits provide a means of restricting the numbers of fish taken by each angler during the whole season or parts of the season (days or weeks). Anglers may be required to stop fishing when they reach their bag limit or alternatively may be allowed to continue fishing as long as they release their catch. Bag limits will often only restrict the catches of the more successful fishermen because the limit will be greater than the average salmon catch per angler. For example, the average catch rate in England & Wales in 1993 was 0.05 salmon per angler per day (i.e. on average each salmon angler took one salmon for every 20 days fished). Thus, even low bag limits (e.g. one fish per day or week) may affect very few fishermen. However, on rivers where a small number of fishermen take a substantial proportion of the total rod catch, bag limits may be effective and may be used to share out the resource more evenly without significantly reducing access to the fishery.

As with quotas, the main problem with bag limits, whether imposed by statute or voluntarily, is enforcement; where they are voluntary they may be ignored. Thus in Canada, for example, carcass tagging is used to enforce bag limits. Another drawback is that some anglers may interpret a bag limit as an acceptable catch level for all individuals and may thus see it as a target. Since these limits will often be set above the mean catch, this could result in anglers trying to increase their catch. Finally, bag limits usually apply to individuals; thus, even if anglers stop fishing when they reach their limit, the purpose of the rule can be undermined by the fishing being relet to another angler for the remainder of the time.

In England & Wales there is provision for making byelaws to impose bag limits. Daily, weekly and season limits have been imposed on some rivers. Byelaws may also specify that anglers who catch and kill their bag limit in any period are required to cease fishing for salmon on the river in question for the remainder of the given period. They may also require that fish returned to the river alive must be counted against the bag limit.

In Scotland there is no provision for imposing bag limits.

Some owners or tenants of fishing rights operate voluntary schemes limiting the number of salmon to be taken in a day but sometimes covering longer periods.

5.5.3 Possession limits

A further restriction on fishing activity may be imposed by limiting the number of fish that may be legally possessed at any one time.

In England & Wales and in Scotland there are no statutory provisions for the introduction of possession limits.

5.5.4 Prohibition of sale

Prohibiting the sale of rod-caught fish may be used to discourage anglers from taking more fish than they require for their own immediate needs and may encourage voluntary restraint on fishing. It may also reduce illegal fishing activity by making it impossible for poachers to dispose of their catch in the pretence that they have been caught legally by rod and line.

In England & Wales there is no statutory provision under which the sale of rod-caught fish can be prohibited.

In Scotland it is unlawful to sell salmon caught in the Tweed during the additional periods allowed for angling (1 to 14 February and 15 September to 30 November). Otherwise, as in England & Wales, there are no statutory provisions to prevent the sale of rod-caught fish.

Some fishery owners, particularly local clubs, operate a 'no sale' policy and may take firm action against a member who breaks this rule. However, where the average catch is low this may have little effect upon the number of fish taken.

5.6 RELEASE OF CAUGHT FISH

5.6.1 Release of specific categories of fish

For many years, there have been regulations which make it an offence to deliberately take or kill salmon at certain stages in their life-cycle and requires them to be released if they are caught accidentally. Juvenile salmon, for example, are protected by use of a minimum size limit or by specific prohibition on fishing for fry, parr or smolts. Protection is usually extended to fish around spawning time and kelts before they return to the sea.

Minimum or maximum size limits may also be used to protect a particular component of the population. For example, MSW salmon may be afforded greater protection by requiring all fish over a certain size (e.g. 63 cm) to be released, as in Canada. In British Columbia, similar measures have been used to protect declining wild stocks of steelhead trout; only hatchery-reared fish, distinguished by a well-healed adipose fin clip, could be killed, wild fish having to be released immediately after capture. In this case, it was notable that the attitude of anglers to the regulation gradually changed as they became convinced of its value, so much so that many voluntarily began to release hatchery-reared fish also.

In England & Wales the Salmon and Freshwater Fisheries Act 1975 prohibits the taking of immature or unclean salmon. Immature salmon are defined as being less than 12 inches in length and unclean fish as those about to spawn, having recently spawned or not yet recovered from spawning. These offences are backed up by provisions which limit the possession or trade in eggs, or immature or unclean fish. Alternative minimum size limits may be imposed but there is no provision for introducing maximum size limits. It may, however, be possible to provide for this by modifying existing legislation by means of an Order made under section 115 of the Water Resources Act 1991.

In Scotland there is a prohibition on taking immature salmon (fry or smolts) or unclean or unseasonable fish. These offences are backed up by provisions which

limit possession or trade in eggs, or juvenile, unclean or unseasonable fish. In these contexts unclean fish means fish which have spawned but not yet returned to the sea and unseasonable includes fish which are on the 'eve of spawning'. There has been doubt about the length of the 'eve of spawning' and difficulty in distinguishing unseasonable fish from those that may be lawfully taken. A Scottish Court has recently decided that the only safe objective criterion is whether or not eggs or milt can be expressed from the fish by gentle pressure on the belly. It is hard to see how the Court could have come to any other conclusion. Some anglers and fishery managers have expressed disappointment that this indicates that there is no effective criminal sanction against those who kill highly coloured fish during the fishing season. However, it would seem that it is not possible to set fully objective and practical criteria to distinguish the degree of colouring beyond which a fish may not be killed. Elsewhere in this report we have recommended that DSFBs should be able to apply to the Secretary of State for a Regulation to specify bag limits during certain periods or in certain areas. This could provide a mechanism to limit the number of fish taken towards the end of the fishing season.

There is no provision for applying size limits in Scotland.

5.6.2 Catch and release

The practice of fishing with the intention of releasing all of the adult fish caught is a relatively recent development in salmon fisheries, although it has long been the practice in fishing for coarse fish species. This has been termed 'catch and release' and has been introduced as a management measure in some places to allow angling to continue without killing the fish. In most cases, such controls have been introduced to allow anglers to continue fishing after they have caught their bag limit. The practice is, however, not without its detractors, many of whom have ethical objections along the lines that it is only the killing and eating of the fish that can justify the hooking, playing and landing of it. Some also object to the possibility of a fish being caught more than once.

Catch and release has been used to protect depleted runs of Atlantic salmon in many rivers in North America but is not so commonly practised elsewhere. In Maine, USA, a catch and release policy was originally introduced in conjunction with a seasonal bag limit of one fish, but in 1995 all fish caught had to be released.

One practical concern about catch and release is that fish may die after being released, or the capture and handling may reduce their chance of spawning successfully. Studies have shown that wild salmon can recover quite quickly if they are treated with care, and high survival rates have been recorded in radio-tracking in Scotland. However, mortalities will occur if fish are handled roughly. Mortalities tend to increase at higher water temperatures, which means that catch and release may result in more fish being killed in summer than at other times in the season. It also appears that even a relatively short exposure to the air (e.g. one minute) may very greatly increase the likelihood of a fish dying. Fish may also die as a result of damage caused by the hook, particularly if the lure is taken deeply, or from handling. The use of barbless hooks allows fish to be released more quickly. Mortality can also be reduced by shortening the time that fish are played, minimising handling and taking care not to squeeze the fish or hold them by the gills. In line with the recommendation in our earlier report, *Run Timing of Salmon,* there is a need for more detailed studies on survival after release if catch and release is to be promoted more widely and its implications are to be fully understood.

Catch and release may be effective in reducing exploitation, but it is difficult to police and to ensure that fish are handled sufficiently carefully to avoid subsequent mortalities. It must not therefore be used as a substitute for more rigorous measures should these be necessary to reduce angling exploitation in certain circumstances. There is a danger that the spread of the practice may be used as an excuse to increase angling activity on stocks requiring protection. Heavy angling pressure could result in fish being caught several times, and this could cause mortalities due to excessive handling or fish being repeatedly exhausted. Much will therefore depend upon the manner in which catch and release is practised, and there is a need for very clear instructions for fishery managers and anglers. In this respect we are aware of and welcome the initiatives to produce explanatory leaflets on this technique but consider that greater emphasis needs to be given to the care with which fish should be released and the potential for damage if they are removed from the water. We recommend that the appropriate authorities should prepare comprehensive guidelines and disseminate them to proprietors, ghillies and anglers; where necessary appropriate training should also be given.

In England & Wales we understand that it would probably be possible to make byelaws which require the release of all salmon caught in a rod fishery.

In Scotland there is no provision for making such byelaws.

Many anglers now practise catch and release on a voluntary basis and some fishery owners enforce the policy in certain circumstances.

6. THE EFFECTIVENESS OF CONTROL MEASURES

It is now widely accepted that individual rivers or even parts of larger river systems contain populations of salmon that are genetically distinct from each other and display differing behavioural characteristics. Thus, for example, salmon from one river may have a tendency to return to fresh water as early-running MSW fish, whereas most of those from another river may return as grilse. Different measures may therefore be required to control fishing activities on these rivers in order to protect the stocks from over-exploitation.

Section 5 describes a wide range of measures that are used to control the level of exploitation of salmon by angling. On most rivers, a combination of measures is used; some may be imposed by statute while others are agreed between proprietors or within clubs or associations.

6.1 VOLUNTARY CONTROLS

Where it is accepted by all owners and anglers, voluntary adoption of regulatory measures potentially provides a versatile means of controlling exploitation levels. Thus, for example, most proprietors of salmon fisheries restrict the number of anglers that may fish their water at any one time. More particularly, proprietors may restrict the methods of fishing or lures that may be used when fishing their water, or may require the release of specified components of the catch.

Such voluntary controls can provide a general degree of restraint, but are not usually related to the requirements of the whole salmon population and so may not provide a satisfactory level of control on the overall level of exploitation. In addition, there may be reluctance on the part of some proprietors or tenants of fisheries to agree to limit their fishing effort if others exploiting the same salmon population are not prepared to adopt the same restrictions. In such cases, where voluntary measures have failed, statutory controls will be necessary. On larger rivers, the need for statutory controls will be almost inevitable because of the difficulty of getting agreement between many fishing interests.

On some Scottish fisheries, restrictions which were originally voluntary have been incorporated in the title deeds to the fishings and have become legally binding on subsequent owners.

6.2 STATUTORY CONTROLS

Some of the fisheries legislation in England & Wales and Scotland is sufficiently flexible in application to accommodate the variable habits of different salmon populations. Thus, for each river or part of a river, the Annual Close Time can be set in such a way as to permit exploitation of late-running salmon but protect the fish when spawning starts. This takes account of the fact that spawning occurs two to three months earlier in rivers in the north compared with those in the south.

In England & Wales, a wide range of the measures described in Section 5 can be employed to regulate the exploitation of salmon populations by angling. However, in order to make better use of our growing understanding of salmon, there may be a need for greater flexibility in controlling exploitation, for example by limiting the

retention of a particular size group of fish. At present it is possible to impose a minimum, but not a maximum, size limit. This reduces the scope for managers to limit the exploitation of depleted runs of large, MSW salmon. The ability to respond rapidly to perceived problems is also restricted by the current administrative procedures for the introduction of byelaws and Orders which often prove to be cumbersome, expensive and time-consuming.

Relatively few of the measures described in Section 5 can be enforced by statute in Scotland, and the mechanism whereby effective management of salmon fisheries can be achieved by DSFBs is inadequate. The Secretary of State for Scotland is empowered to make only a limited range of regulations, leaving little opportunity to impose measures which may be necessary to achieve effective fishery management. Thus, additional powers are required in Scotland in order to make the regulatory system fully effective. As in England & Wales, it can also be difficult to respond quickly to perceived problems in Scotland.

7. DISCUSSION AND CONCLUSIONS

In considering the impact of angling on salmon stocks, we faced the problem, which we have noted in previous reports, that there is limited information on the size and state of salmon stocks in Great Britain. Such data are essential for the proper management of rod fisheries and also for the understanding and acceptance, by proprietors and anglers, of the reasons for the imposition of measures to limit angling exploitation. Nevertheless, we have seen that, in some cases, angling exploitation can have a significant impact on salmon populations. The extent of the impact will depend not only on the level of exploitation but also on the state of the stock, which will affect the ability of that stock to withstand exploitation.

We recognise that many salmon stocks are under pressure from a range of man-made and natural factors. However, we are satisfied that there is no evidence of a general decline in stocks requiring further action to control angling exploitation on a national basis at this time. In any event, we do not consider that such generalised regulation of fishing activities would be appropriate because of the great variability of stocks and the characteristics of different rivers; rather it is necessary to regulate angling on a river by river basis. However, there is evidence that, in some rivers, certain stock components are heavily exploited by angling and in such circumstances specific controls are required.

In reviewing the measures which may be used to control angling exploitation, we have seen wide variation in the scope of those measures available in England & Wales and in Scotland; this variation partly reflects differences in the history and present structure of management and administration north and south of the border. We see no need for there to be harmonisation *per se* throughout Great Britain, but recommend that measures which are effective in controlling angling exploitation in some parts of the country should be available everywhere in case they are needed in the future. We note that the NRA has recently published *A Strategy for the Management of Salmon in England & Wales* and that the Secretary of State for Scotland has set up a Task Force to recommend a strategy for the management, conservation and sustainable exploitation of Scottish salmon stocks into the next century. We welcome these initiatives.

Although in England & Wales the mechanisms by which subordinate legislation can be introduced to regulate angling differ from those in Scotland, in essence they are the same. Ministerial approval is required before a byelaw can be introduced in England & Wales or an Order can be made in Scotland. Salmon fisheries in inland waters in Great Britain are private properties and the imposition of measures by statute to limit angling exploitation in any way can have an adverse effect on rentals and on capital values. We do not believe, therefore, that any change should be made to the level at which approval is necessary for making regulations.

However, we do conclude that the introduction of new regulations should be processed more rapidly. We recommend that, in England & Wales, no more than four months should elapse between the formal advertisement of a byelaw and its determination, provided that a Public Inquiry is not necessary. In Scotland, no more than four months should elapse between the formal advertisement of an application to the Secretary of State for Scotland to make a regulation and its determination, again provided that a Public Inquiry is not necessary.

In the event of a serious reduction in stocks (e.g. following a major pollution event), Ministers have only limited powers to act swiftly to restrict exploitation. We therefore recommend that Ministers should, in an emergency, be empowered to approve Orders or byelaws under an accelerated procedure for a limited period, say a maximum of 12 months, when evidence suggests that a salmon stock or a stock component is severely threatened. Such measures would automatically lapse at the end of the specified period.

We are advised that, in England & Wales, it is not within the NRA's remit to alter how or to whom any exploitable surplus salmon should be apportioned when regulating fisheries. In Scotland, because all fisheries, both rods and nets, are privately owned, they can be sold or let. This provides a means of adjusting relative levels of exploitation, but it depends upon having a willing buyer and seller. We consider that greater account should be taken of the economic importance of angling when regulating salmon angling and netting activities, and that the appropriate authorities should have powers to make changes to the relative levels of exploitation.

Fishing for salmon with the intention of releasing all fish hooked (catch and release) is practised in some countries and has a growing following in Great Britain, although some anglers have reservations about this measure. If stocks are severely depleted, catch and release may be the only system under which it is possible to maintain an economically viable fishery. Where it is considered that catch and release is required, it should preferably be based upon voluntary agreement but powers should also be available to introduce this measure on a mandatory basis in situations where restriction of catches is necessary but voluntary measures are unlikely to be comprehensively observed. Before introducing catch and release, consideration should be given to some or all of the other regulations discussed in this report.

To achieve the maximum effectiveness as a conservation measure, the unhooking and release of salmon needs to be conducted with great care. We are aware of and welcome the initiatives to produce explanatory leaflets and Codes of Good Practice on this technique but consider that greater emphasis needs to be given to the care with which fish should be released and the potential for damage if they are removed from the water. We recommend that the appropriate authorities should prepare comprehensive guidelines, disseminate them to proprietors, ghillies and anglers, and encourage relevant training as necessary.

We recommend that where catch and release is introduced, its efficacy is carefully monitored.

Some of the powers to control angling exploitation under the existing legislation in England & Wales are unclear. In areas of doubt, we recommend that the legislation be amended to remove uncertainty.

We note also that in England & Wales there is no provision for imposing any restriction upon the size of fish killed other than a minimum size limit. We consider that a maximum size limit will, in some circumstances, provide a useful means for protecting MSW fish while allowing exploitation of grilse to continue. We therefore recommend that appropriate enabling powers be provided by means of an Order made under section 115 of the Water Resources Act 1991.

In Scotland, the Secretary of State has powers to make only a few of the regulatory measures described in Section 5 of this report, and some of these may only be

introduced at the request of DSFBs, or of proprietors where no Board exists. We recommend that the Secretary of State for Scotland should have powers on application by DSFBs to make regulations specifying:

(a) the maximum number of fish which may be taken by each angler during a specified period on designated rivers or parts thereof;

(b) the size of fish which may be taken;

(c) the characteristics and number of hooks, and the weight of line which may or may not be used with any bait or lure;

(d) the methods of angling which may be employed (e.g. fly-fishing only) and those which are prohibited;

(e) the number of rods which an individual angler may use at any one time;

(f) the areas on a river where fishing is not permitted; and

(g) the release of some or all of the fish caught during all or part of the season and in all or part of a District.

We also recommend that in areas with no DSFB, the Secretary of State should be able to introduce regulations on his own initiative.

We have noted that there is a Weekly Close Time for angling in Scotland (at present the 24 hours of Sunday) and that, since 1986, the Secretary of State can make regulations to change the extent of that close time provided that such regulations do not shorten the period that applied in 1986. (Regulations have been made to set a new weekly close time for nets in 1988, but no change has been made to the angling period.) However, although the annual close time can be altered on a District by District basis, the weekly close time is fixed uniformly over the whole of Scotland and at present any variation would have to apply throughout the entire country. We recommend that a power should be available to the Secretary of State for Scotland to vary, on application of the relevant Board, the weekly close time for angling on a District by District basis. This would provide another mechanism that can be applied to restrict exploitation of a certain stock or stocks, without unnecessary restriction elsewhere.

We have noted that in England & Wales there is no weekly close time for angling and no ready mechanism under which one could be made. We recommend that the necessary enabling powers should be provided in case it should prove necessary to use this mechanism to restrict exploitation.

We recognise that the enforcement of a regulation specifying a bag limit presents difficulties and consider that, for bag limits to be fully effective, a carcass tagging scheme should be in operation. We therefore recommend that enabling legislation is introduced to allow Ministers to establish carcass tagging in Great Britain.

There is no statutory mechanism for limiting the number of anglers who may fish a river, and the number who may fish on a given stretch is based mainly on historical precedent and can be set by proprietors. We do not consider a regulation limiting numbers of anglers to be practical or necessary at this time. However, we welcome

the acceptance by most proprietors of voluntary limitation of access and the existence of enforceable agreements on the numbers who may fish a given stretch drawn up between some adjacent proprietors.

We welcome the arrangements requiring that takeable fish which are caught and released are recorded separately in catch statistics in Scotland and the arrangements for the separate recording of fish believed to be of farm origin. However, in recording catch statistics in England & Wales no distinction is made between fish that must be released (e.g. unclean and unseasonable fish) and fish that are released voluntarily. We recommend that only voluntary returns should be so recorded.

There is no power to control the sale of rod-caught fish. Prohibiting the sale of rod-caught fish may reduce angling exploitation in some circumstances. We therefore consider that a power should be available to Ministers to prohibit the sale of such fish during all or part of the year.

8. SUMMARY OF RECOMMENDATIONS

Many salmon stocks are under pressure from a range of factors, but we are satisfied that there is, at present, no need for further control of angling exploitation at a national level. We do not consider such generalised regulation of fishing activities to be appropriate because of the great variability between stocks and the characteristics of different rivers; rather it is necessary to regulate angling on a river by river basis. There is evidence that in some rivers, certain stock components are heavily exploited by angling and in such circumstances specific controls are required.

We make the following recommendations.

- Harmonisation of the measures regulating salmon angling throughout Great Britain is not required, but measures which are effective in controlling angling exploitation in some parts of the country should be available everywhere in case they are needed in the future.

- In England & Wales, no more than four months should elapse between the formal advertisement of a byelaw and its determination, provided that a Public Inquiry is not necessary.

- In Scotland, no more than four months should elapse between the formal advertisement of an application to the Secretary of State for Scotland to make a regulation and its determination, provided that a Public Inquiry is not necessary.

- Ministers should, in an emergency, be empowered to approve Orders or byelaws under an accelerated procedure for a limited period when evidence suggests that a salmon stock or a stock component is severely threatened.

- The appropriate authorities should have powers to make changes in the relative levels of exploitation between rods and nets, taking account of relevant economic and social factors.

- With respect to catch and release:

    (a) powers should be available to introduce this measure on a mandatory basis where it is required;

    (b) the appropriate authorities should prepare and disseminate comprehensive guidelines and encourage relevant training as necessary; and

    (c) where catch and release is introduced, its efficacy should be carefully monitored.

- Where the powers to control angling exploitation under the existing legislation in England & Wales are unclear, the legislation should be amended to remove uncertainty.

- Appropriate enabling powers should be introduced in England & Wales for imposing:

  (a) a maximum limit upon the size of fish that may be killed; and

  (b) a weekly close time for angling.

- The Secretary of State for Scotland should have powers on application by DSFBs to make regulations specifying:

  (a) the maximum number of fish which may be taken by each angler during a specified period on designated rivers or parts thereof;

  (b) the size of fish which may be taken;

  (c) the characteristics and number of hooks, and the weight of line which may or may not be used with any bait or lure;

  (d) the methods of angling which may be employed (e.g. fly-fishing only) and those which are prohibited;

  (e) the number of rods which an individual angler may use at any one time;

  (f) the areas on a river where fishing is not permitted; and

  (g) the release of some or all of the fish caught during all or part of the season and in all or part of a District.

- The Secretary of State for Scotland should be empowered to make regulations on his own initiative in Districts where there is no DSFB.

- A power should be available in Scotland to vary the weekly close time for angling on a District by District basis on application of the relevant Board.

- Enabling legislation should be introduced to allow Ministers to establish carcass tagging in Great Britain.

- Distinction should be made in catch returns in England & Wales between fish that are required to be returned (e.g. unclean and unseasonable fish) and takeable fish that are released voluntarily.

- Enabling legislation should be introduced to allow Ministers to prohibit the sale of rod-caught salmon during all or part of the year.

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